

To: Director and Laboratory Staff
From: Survey and Appraisal Section
Subject: SURVEY NOTES

F A R M S I T U A T I O N

FIRST QUARTER FARM INCOME 5 PERCENT HIGHER THAN LAST YEAR

During the first 3 months of 1949, farmers will probably take in about 6.6 billion dollars from marketings, or 5 percent more than in the first quarter of last year. Prices so far this year are averaging about 10 percent below last year, but the marketings and the quantities placed under loan are substantially above those of a year ago. Farmers will probably receive 3.8 billion dollars from livestock and products, slightly less than last year, and 2.8 billion dollars from crops, nearly one-fifth above last year's first quarter.

The Farm Income Situation, March 10, 1949, p. 2.

Trade has been sluggish, with department store sales during February running below a year ago.

National City Bank of New York News Letter, March 1949, p. 1.

C O T T O N L I N T

COTTON CONSUMPTION CONTINUES TO DECLINE; RAYON SHIPMENTS DECLINE

Cotton consumption in February was the lowest since 1939. At the same time, deliveries of rayon staple during the first two months of 1949 were 24 percent under a year ago, but deliveries of rayon yarn were slightly greater. American Bemberg announced a 50 percent cut back in production, American Viscose Corp., a 20 percent cut, to keep from piling up inventories. DuPont also was reported to have curtailed its viscose staple output. This development is highly significant because it is the first rayon production curtailment since before the war. Rayon was the last of the textile fibers to hit a "buyer's market."

Table 1. Cotton consumption and stocks, and spindle hours in cotton mills

	: February	: January	: December	: February
	: 1949	: 1949	: 1948	: 1948
Consumption, bales.....	640,182	674,463	680,670	785,231
On hand, 1,000 bales.....	9,118	9,840	10,461	6,713
Active spindle hours, billions:		8.4	8.5	9.8
Spindle activity, percent of...				
80-hour capacity <u>1/</u>		112.0	104.1	137.6

1/ Includes activity on fibers other than cotton, totaling 0.6 to 0.7 billion spindle hours for each month shown.

From Census reports.

COTTON AND VISCOSE STAPLE PRICES STABLE; PRICE OF ACETATE STAPLE DROPS

Cotton and viscose staple prices remained unchanged during the first quarter of 1949, with viscose staple continuing to have a slight advantage in cost. The price of acetate staple, however, was cut from 48 to 42 cents per pound, delivered, on March 1st, thus making this fiber much more competitive with cotton than

previously. Mill margins on cotton goods dropped only slightly from January to February, but are about half what they were a year ago.

Table 2.- Prices of raw cotton, rayon staple and cotton fabrics, and cotton mill margins in cents.

	:Mar. 17: : 1949 :	Feb. : 1949 :	Jan. : 1949 :	Feb. : 1948 :	Average : 1945
Cotton, Middling 15/16"	:	:	:	:	:
delivered at mills, lb.....	34.33	34.41	34.15	34.02	23.76
Rayon, viscose staple,	:	:	:	:	:
equivalent price 1/, lb.....	32.93	32.93	32.93	32.04	22.25
Rayon, acetate staple,	:	:	:	:	:
equivalent price 1/, lb.....	37.38	42.72	42.72	42.72	38.27
Cotton fabrics, average 17 constructions,	:	:	:	:	:
Price for cloth from 1 lb. of cotton 2/:	-	64.55	65.04	96.22	43.21
Mill margin 3/.....	-	32.29	32.78	63.65	20.86
Sheeting, 37" 4.00, yd. 4/.....	16.50	16.50	16.50	22.25	11.10
Osnaburg, 36" 2.35, yd. 4/.....	21.25	21.25	21.25	23.50	14.89
Printcloth, 38-1/2" 5.35, yd. 4/.....	14.75	15.00	15.00	21.88	9.60
	:	:	:	:	:

- 1/ Cost to mill of same amount of usable fiber as supplied by one pound of cotton (rayon price x.89).
- 2/ Price of approximate quantity of cloth obtainable from a pound of cotton with adjustments for saleable wastes (Cotton Branch, PMA).
- 3/ Difference between cloth prices and prices (10-market average) of cotton assumed to be used in each kind of cloth (Cotton Branch, PMA).
- 4/ From Daily Mill Stock Reporter and Daily News Record.

SEA ISLAND AND UPLAND VARIETIES CROSSED TO PRODUCE NEW VARIETY

A new variety of cotton, which has been under experiment for 2 or 3 years in Berrien County, Georgia, will be introduced to Lowndes, Georgia, farmers by J. G. Jenkins, Cotton Specialist at Coastal Plains Experiment Station, Tifton, Georgia. It is a cross between Sea Island and several varieties of short staple cotton. An average yield of 250 pounds of lint per acre was produced in Berrien last year and it sold for 45 cents a pound against 30 to 31 cents for other varieties.

Journal of Commerce, Feb. 23, 1949, p. 17.

FARMERS TO PLANT 8 PERCENT MORE COTTON ACREAGE IN 1949; NATIONAL COTTON COUNCIL SEEKS OUTLETS FOR SURPLUS COTTON

With wartime price supports continuing for another year, cotton farmers are planting 8 percent or more acres than last year. This will lead to a 14 million bale crop this year, or more if weather is ideal like last year. To keep the surplus from growing to higher levels, the National Cotton Council hopes for increased exports and plans campaigns to widen industrial uses in paper, insulation, bags, awnings, uniforms and towels.

Wall Street Journal, March 10, 1949, p. 1.

FIVE TO SEVEN PERCENT OF 1948 CALIFORNIA CROP HARVESTED MECHANICALLY

About 475 mechanical pickers harvested from 5 to 7 percent of California's 1948 crop of 960,000 bales. The crop was grown on 804,000 acres, yielding 572 pounds of lint per acre. In 1940 cotton and cottonseed accounted for 6 percent of

California's total cash receipts from farm marketings, in 1947, 10 percent.
Cotton Gin and Oil Mill Press, Jan. 8, 1949, p. 12.

Last year California grew \$148 million worth of cotton, making it the state's No. 1 crop, well ahead of grapes (\$102 million) and oranges (\$96 million).
Time, March 21, 1949, p. 90.

MECHANIZED FARMING TO REDUCE SOUTHERN FARM WORKERS BY 2 MILLION

In a study of Southern progress, Dr. Buford Brandis, associate professor of Business Administration at Emory University, stated: "The mechanical cotton picker, the flame cultivator, the tractor and other devices are going to reduce the number of workers needed on Southern farms by 2 million within the next 15 years, according to careful estimates of the experts." Dr. Brandis also pointed out that huge numbers of persons are leaving agriculture to seek industrial employment in the South and throughout the region active attempts are being made to foster industrial growth.

Southern Textile News, Mar. 19, 1949, p. 4.

COTTON TEXTILE INDUSTRY AND EQUIPMENT

NEW SYSTEM REPORTED TO COLLECT BROKEN ENDS BY SUCTION

A system for installation with ring spinning frames which collects broken ends of cotton by suction is reported to have been fully developed in England. Known as Pneumafil, it is said to reduce substantially the end breakage rate, principally because adjacent ends cannot be snapped by "lashing" when a single break occurs. This will result in less piecings and the work load can be reduced, thereby permitting more spindles to be minded by one operator. The waste, when collected, is clean, open and of the same quality of the yarn, thus permitting it to be re-spun immediately.

Journal of Commerce, March 8, 1949, p.12.

TEXTILE MACHINE MANUFACTURER LAYS OFF WORKERS

H & B American Machinery Company (one of 3 U. S. makers of cotton spinning machinery) has laid off 200 workers and plans to discontinue 600 more jobs in the next 3 months. Some textile machine shops still are running irregular, sketchy operations on a second shift, but the industry now is filling orders faster than it is writing them.

Journal of Commerce, March 15, 1949, p. 1.

COTTON PRODUCTS

COTTON LOSS IN STRENGTH FROM FIBER TO YARN HELD DUE TO FIBER IRREGULARITY, NOT SHOWN ON PRESENT TESTS

According to an unsigned article in the American Wool & Cotton Reporter (Feb. 10, 1949, p. 67), it has been assumed that the tensile strength of selected cotton fibers has been 3.50 to 3.75 grams per denier, but when spun into yarn, the strength has been only 23 percent of this amount. In contrast, a comparable spun viscose yarn would have 70 to 80 percent of basic fiber strength, despite having a smoother surface and less twist. Cotton's strength loss has been held due to slippage, but it is really due to fiber irregularity. When jaws in a breaking strength test on raw cotton are moved from 1/4-inch to 1/2-inch, there will be a lower tensile strength by at least 50 percent. "Thus, loss in spinning strength from raw material is not 75 percent, as ordinarily assumed, but only about 50

percent and, possibly, not so much different than the results for synthetic materials." Steel and synthetic fibers are said to be more or less uniform from end to end, while the "cotton fiber and wool fiber vary from end to end in tensile strength." The former lose very little between jaws, while the latter do. "If some cotton is much weaker at various points than others, it would be a good thing if such cotton were eliminated, provided other and better types can be developed."

American Wool & Cotton Reporter, Feb. 10, 1949, p. 98.

OUTPUT OF COTTON FABRICS IN 4TH QUARTER 1948 UNCHANGED FROM 3RD QUARTER

Output of cotton broad woven goods was 2,260,450,000 yards during the last quarter, unchanged from the previous quarter, but 12% less than a year ago. Compared to a year ago, output of duck was up 20 percent; output of sheetings down 24 percent; napped fabrics, 23 percent; towels, 22 percent; and fine cotton goods, 17 percent.

Facts For Industry, Census Bureau, March 14, 1949.

BAGS: USE OF COTTON FLOUR BAGS CHEAPER THAN BURLAP OR PAPER BAGS

Prices of new cotton and paper flour bags remained unchanged during the first three months of 1949, but prices of burlap flour bags have been declining since January. On the basis of once-used bag quotations, the net cost of using cotton bags is \$13 less than burlap and \$7 less than paper bags per thousand (See footnotes 3 and 5 of table below).

Table 3.- Midmonth prices of 100-lb. flour bags

(Dollars per thousand)

	March 1949	February 1949	January 1949	March 1948	September 1945
Prices, new, St. Louis 1/	:	:	:	:	:
Cotton.....	237.00	237.00	237.00	315.60	173.50
Burlap.....	215.75	225.30	234.25	229.20	149.85
Paper.....	114.05	114.05	114.05	108.65	87.40
Prices, second-hand, New York 2/	:	:	:	:	:
Cotton 3/.....	110.00	110.00	110.00	125.00	110.00
Burlap.....	105.00	105.00	115.00	110.00	130.00
Paper.....	10.00	10.00	10.00	15.00	-
Difference 4/	:	:	:	:	:
Cotton 5/.....	127.00	127.00	127.00	190.60	63.50
Burlap.....	110.75	120.30	119.25	119.20	19.85
Paper.....	104.05	104.05	104.05	93.65	87.40

1/ Cotton, 37" 4.00 sheeting cut 43"; burlap, 36" 10 oz. cut 43"; paper, 18 x 4½ x 36-¾"; all l. c. l. shipments. From a large bag manufacturer.

2/ For bakery run bags as given in Daily Mill Stock Reporter.

3/ Prices for once-used bags are higher than quotations shown. Once-used bags sold for \$180 per thousand for the first quarter of last year and \$140 per thousand thereafter on New York market.

4/ New prices less second-hand prices.

5/ On basis of once-used bag quotations, net cost of using cotton bags was \$97.00 during Jan. - Mar. 1949, and \$135.60 during March 1948.

BAGS: BULK HANDLING OF FLOUR BY NEW RAILWAY CAR

Most flour is transported from mill to bakery in paper or cotton sacks. General American Transportation Corp. has now designed a new kind of railroad car

it figures will save 10 to 15 cents a sack on shipping flour. This is more than the profit many millers are making today on the flour they are selling. The car is both loaded and unloaded pneumatically. One of the biggest savings claimed is on the cost of sacks—they run about 10-3/4 cents each. It costs about 3 cents more to open and dump a sack of flour. National Biscuit Co. is using the first of these new cars.

Wall Street Journal, Feb. 16, 1949, p. 7.

(See, also, "Paper" under "Competitive Products")

INSULATION: SEARS TO PROMOTE FLAMEPROOF COTTON FOR SOUTH

One of cotton's newer commercial products, flameproof cotton insulation, will be given added distribution throughout the South this week as Sears, Roebuck & Co. begins sale of the material through its principal outlets in Southern States, the National Cotton Council announced today. Cotton insulation has been handled for years in northern branches of Sears. Since the war, Sears officials said, the South has become increasingly insulation conscious. Flameproof cotton's heat and cold resistant qualities, plus its lighter weight and ease of installation, make it one of the most efficient and economical insulating materials on the market, company officials added. Distributing plants of the firm which will carry the product and list it in spring catalogs are located in Memphis, Atlanta, Dallas, and Greensboro, N. C.

Journal of Commerce, Feb. 14, 1949, p. 18.

NON-WOVEN FABRICS: SOURCE OF INFORMATION GIVEN

A comprehensive review of non-woven fabrics is given in the Daily News Record for February 14, 1949. It discusses companies, processes, specifications, and uses. Companies mentioned include West Point, Kendall, Avondale, Chicopee, Henry H. Frede Co., Visking Corp., and Minnesota Mining & Manufacturing Corp.

TIRE FABRIC PRICES UNCHANGED

Open market prices for tire fabrics remained unchanged from February to March.

Table 4.— Prices of cotton and rayon tire fabric,
March 1 and February 1, 1949

Fabric	Cord	Fabric weight per sq. yd.	Price per pound		Price per sq. yd.	
			Mar. 1	Feb. 1	Mar. 1	Feb. 1
		Pounds	Cents	Cents	Cents	Cents
Passenger car tires						
Cotton fabric.....	12/4/2	.86	72	72	62	62
Rayon fabric.....	1650/2	.67	66.5	66.5	45	45
Truck tires						
Cotton fabric.....	12/4/2	.86	1/	1/	1/	1/
Rayon fabric.....	1100/2	.54	69	69	37	37
Rayon fabric.....	2200/2	.81	65	65	53	53

1/ No quotations received.

Based on reports from independent rubber companies for fabric constructions most heavily used.

TIRE FABRIC: RAYON EXCEEDS COTTON IN TIRE FABRIC OUTPUT IN 4TH QUARTER OF 1948 FOR THE FIRST TIME.

Output of rayon tire fabric exceeded output of cotton tire fabric for the first time in the 4th quarter of 1948. At the same time the total output of tire fabric was lower than for some time, although still nearly double the prewar rate.

Table 5.- Production of cotton and rayon tire cord and fabric in the United States, 1939-1948

Year	Quantities			Percentages		
	Rayon	Cotton	Total	Rayon	Cotton	Total
	Million	Million	Million			
	pounds	pounds	pounds	Percent	Percent	Percent
1939	9 1/2	260	269	3	97	100
1942	28	223	251	11	89	100
1943	44	238	282	16	84	100
1944	94	265	359	26	74	100
1945	181 2/3	282	463	39	61	100
1946	212 2/3	311	523	41	59	100
1947	230 2/3	345	575	40	60	100
1948	249 2/3	307	556	45	55	100
3rd quarter	64	76	140	46	54	100
4th quarter	65	64	129	50	50	100

1/ Shipments of rayon yarn to tire manufacturers. From Rayon Organon.

2/ Includes small quantity of nylon.

Compiled from "Facts for Industry," Bureau of the Census.

COMPETITIVE PRODUCTS

FIBERGLAS AUTO TOP MATERIAL NOW ON MARKET

A new top fabric for recovering convertible automobiles has been developed from Vinylite resins fused to cloth woven of Fiberglas yarns, producing a material of maximum strength which will not stretch or shrink as well as having resistance to wearing stress, weathering mildew, fire, oils, greases and other elements that cause deterioration of ordinary top fabrics. Known as "Cordoglas," the material is said to be non-absorbent and makes possible the washing of the convertible top in the same manner as washing the rest of the car.

Journal of Commerce, March 11, 1949, p. 4.

NYLON: DUPONT BEHIND ON ORDERS FOR STAPLE

The spun nylon demand is increasing rapidly and lack of production has forced DuPont to place nearly all of its customers on a reserve list since January 1st, 1949. "DuPont is starting its new Chattanooga plant by regenerating their waste and so-called staple spinning products," because chemical intermediary capacity is not yet ready. One prominent firm sends DuPont all the waste developed in their various plants.

American Wool & Cotton Reporter, March 3, 1949, p.15.

PAPER: PRODUCTION FOR SHIPPING SACKS ABOUT SAME AS LAST YEAR

During 1948 production of shipping sack paper was 667,499 tons, as compared to 670,889 tons, 1947; and 550,374 tons, 1946.

RAYON: ACETATE STAPLE PRICE REDUCED 6 CENTS

The price of acetate staple was cut from 48 and 50 cents per pound to 42 cents by Celanese Corp. on March 1st. This price drop brings it to within 5 cents per pound of viscose staple, the closest it has ever been. Viscose yarn producers were reported to be cutting back "production for some much needed rehabilitation of plant facilities in preference to reducing prices at this time." Acetate yarn prices "will probably be maintained," it was agreed by major producers. The undertone on these was said to be much stronger than on staple.

Journal of Commerce, March 1, 1949, p.1.

DuPont returned prices of its viscose rayon to a freight prepaid basis, as it had prior to the Supreme Court's basing point decision. This has the effect of cutting prices. American Viscose Corp.'s prices never changed from a freight prepaid basis.

Journal of Commerce, March 1, 1949, p.1.

There would be a good deal of resistance by producers to pressure for lower rayon yarn prices, although present differences between producers probably will be wiped out.

Daily News Record, March 3, 1949, p.22.

RAYON: ACETATE YARN NOW USED IN TEXTILES MORE THAN VISCOSE

"By March 1949 production of acetate filament yarn will have exceeded the combined annual rate of production of viscose and cupra filament yarn other than yarns for tire cord by 14 million pounds." These figures indicate a trend toward use of an increased proportion of acetate yarn in fabrics for textile purposes. For the first time in the history of synthetic yarn (in 1948) the price of acetate yarn was lower than the price of viscose yarn.

Celanese Annual Report, 1948, p.12.

RAYON: DEVELOPMENTS IN STAPLE UTILIZATION DISCUSSED

Consumption of rayon staple in U. S. has climbed from 140 million pounds in 1941 to 307 million pounds in 1948. Rayon in summer suits are now well established. In work clothes, newest development is introduction of a percentage of viscose rayon staple with cotton to produce "unusual appearance and sales appeal without sacrificing required durability" and making a "notable improvement in ironing properties. Towels of all-rayon pile with cotton backing are on the market, and there is considerable interest in the absorbency feature. There has been a new surge of interest in rayon tow with announcement of Warner & Swasey's manufacture of Pacific converters, along with their pin drafters, to make sliver for wool blend suitings. Exceedingly strong yarns have been made from small tows on direct spinning frames, but they require a considerable premium over converted spun rayon yarns. Rayon staple also is used in blends in fine papers.

George L. Storm, Manager, Rayon Staple Sales, American Viscose Corp.
Daily News Record, Feb. 24, 1949, Sec. 2, P. 2.

RAYON: FINISHES LISTED

A comprehensive trade name chart of rayon finishes giving synthetic fiber applied to, and properties, is given in the Daily News Record, Feb. 24, 1949, Sec. 2, page 28.

Daily News Record, Feb. 24, 1949, Sec. 2, p. 28.

RAYON: FORTISAN OUTPUT TO BE EXPANDED, USES GIVEN

Trends for several years resulted (in 1948) in adoption of coated Fortisan as the covering fabric for several airships of the U. S. Navy. Other Fortisan uses included elastic fabrics, pressure hose, racing sails, coated fabric for rain-wear, laces and nets, sewing thread, woven labels, rope, tape, braid, and cords for upholstery trade. Production of Fortisan has been on a relatively limited basis, but steps are being taken to increase output substantially.

Celanese Annual Report, 1948, p. 12.

RAYON: INDUSTRIAL INCREASES TIRE YARN OUTPUT

During the year 1948, Industrial Rayon increased its tire yarn production by nearly 5,000,000 pounds. Expansion program in this department will be completed by end of July 1949, with a total increase of 10 million pounds. A site in West Virginia, purchased in November 1948, will be utilized for a new plant. "when we are satisfied that our research work now under way has perfected new features in our continuous process which will result in greater efficiency in operation and the lowering of costs through better methods and short cuts. . . Our objective is . . . a lower capital cost per pound of annual production."

Annual Report, Industrial Rayon Corp.

RAYON: "MIRACLOTH" USED TO PRINT NEW ADS OF NU-FAB CORP.

on Feb. 27th

What is considered one of the most unusual promotions in the industry broke in the Chicago Sunday Tribune when Nu-Fab Corp. used its product "Miracloth" as an insert in this standard-size paper. The company's two page ad is printed on the product itself. Rolls of "Miracloth," a non-woven rayon cleaning cloth, instead of newsprint were run through the newspaper presses. One side of the ad advised the housewife to rinse the ad in soapy water, which will wash the print off, and in this manner the product could be sampled. To publish the ad, the Nu-Fab Corp. of Chicago paid more than \$40,000 including the cost of the 440,000 square yards of material on which it was printed. Several in the trade see possibilities of similar use of newspapers by manufacturers of fabrics and garments to get samples of the fabrics to customers.

Daily News Record, Feb. 28, 1949, p. 23.

SARAN SALES INCREASE

According to the Dow Chemical Co., sales of vinylidene chloride polymers increased by about 100% in 1948 compared with the previous year. Screen cloth woven from saran monofilament was reported to have accounted for from 30 to 40 percent of the total output and on a volume basis was roughly the same as in 1947. The biggest percentage increase in saran usage was in automobile seat covers. During 1949 it is expected that they will be reduced in price to the \$20 to \$25 range, and on this basis they will be used with fabric covers for this purpose in the ratio of 1:1. Products requiring the use of saran monofilament in rope, handbags and shoes are said to be quiet at the moment.

Modern Plastics, Jan. 1949.

WOOL: ARMY ADOPTS NEW STANDARD OF WOOL TOPS TO BE USED IN SERGES

The Quartermaster Corps (U. S. Army) announced recently it had adopted a new standard of wool tops to be used in serge cloth (because of the stringent supply situation for fine wools). At present, government specifications call for tops or semi-processed yarns made of 60's wool, or the low side of half blood wools. But the new adopted standard will permit the use of 58's which are between three-eighths blood and half-bloods. Domestic wool (58's and 60's) are available in small quantities, but there is considerable production of 60's in Australia and large quantities of 58's-60's grade of South American Montevideo wools.

Wall Street Journal, March 5, 1949, p. 4.

WOOL: IMPORTS FROM SOUTH AMERICA INCREASE

During 1948 (first 10 months) only 24 percent of the apparel wool imported into the United States was from Australia, compared to 51 percent in 1947. In the meantime, Argentina's percentage increased from 13 percent to 44 percent. With this change there was a substantial rise in coarser grades, and a substantial decline in finer grades.

Wool Digest, March 1, 1949, p. 2.

TEXTILE RESEARCH AND EDUCATION

RESEARCH EXPENDITURES

Recently the National Association of Manufacturers made a survey of the research practices of 983 manufacturers. The results were published by the association in a booklet entitled "Trends in Industrial Research and Patent Practice" which can be obtained from the association, 14 West 49th Street, New York City. The following figures are taken from one of the tables in the booklet and seem appropriate to quote here as bearing on the question of research expenditures.

<u>Industry</u>	<u>1947 Cost of Research as Percentages of sales</u>
Food and Kindred Products.....	1.15
Textile Mill Products.....	.95
Apparel and Other Finished Products.....	1.65
Lumber and Wood Products.....	.57
Furniture and Fixtures.....	.50
Paper and Allied Products.....	.72
Printing, Publishing, and Allied Industries	2.55
Chemical and Allied Products.....	1.83
Products of Petroleum and Coal.....	.74
Rubber Products.....	1.36
Leather and Leather Products.....	.44
Stone, Clay and Glass Products.....	1.11
Primary Metal Industries.....	.64
Fabricated Metal Products.....	1.64
Machinery (Except Electrical).....	1.67
Electrical Machinery, Equipment and Supplies.....	2.80
Transportation Equipment.....	2.04
Professional, Scientific, and Controlling Instru- ments, Photographic and Optical Goods, Watches, and Clocks.....	3.34
Miscellaneous Manufacturing Industries.....	2.25
General Average.....	1.60

The Chemical Digest, Vol. 15, No. 1, Spring 1949, p. 3.

INCREASE TEXTILE SALES VIA BETTER USE OF STATISTICS

According to Mr. Anson C. Lowitz, vice-president of J. Walter Thompson Co., New York, the textile industry, compared with other industries, is traditionally weak in two fundamental areas: consumer research and consumer education or advertising. Each year, while millions of dollars are being spent on new plants and machinery, and great laboratories are given over to the development of new fibers, new dyes, new finishes and new techniques, only a handful of pennies are being doled out by a few in the field for inadequate consumer surveys and market research, he continued. Quoting from the 1947 report of the Controllers' Congress of the National Retail Dry Goods Association, Mr. Lowitz said industrial concerns spend from one to five percent on sales research in new methods, products, and markets. Yet, according to the National Industrial Conference Board Report of 1946, the American rayon industry spends three-quarters of one percent...the woolen industry, one-quarter of one percent...and the cotton industry, three-hundredths of one percent...for research and development!

American Wool & Cotton Reporter, Feb. 10, 1949, p. 13.

WOOL BUREAU TO SPEND \$500,000 TO PROMOTE USE OF WOOL

During 1949, the Wool Bureau will spend \$500,000 on promotional and educational work to promote use of wool. \$50,000 has been allocated for a tropical worsted drive. The overall program includes direct attack upon specific markets, slogans, retail sales training, fashion news, the 4-year research program at Princeton, a technological bureau to survey and publish all available data on wool textile production techniques, home economics work, economic studies of men's and boy's clothing markets, an official wool manual for Girl Scouts, and a press service.

Daily News Record, Mar. 7, 1949, p. 1.

BURLINGTON MILLS HAS SERVICE TEST DIVISION

Burlington Mills has had a "Wear Test Division" for 4 years, beginning by giving company employees in Greensboro hose, slips, suits to wear. Many of the girl testers married and moved, but they continued to participate. Burlington now has 400 testers in 15 states including men and women 16 to 65, farmers, mechanics, salesgirls, housewives, doctors. Most are still in Greensboro, but outsiders do a better job, reporting more defects, Mrs. Grace Draper, head of the Division reports. Instructions are sent out with questions. When garments are worn out, they are sent back to the Laboratory.

Southern Textile News, Mar. 5, 1949, p. 6.

BURLINGTON CONTRIBUTES FOR N. C. LIBRARY

The Burlington Foundation, a trust set up by Burlington Mills, has donated \$25,000 to the N. C. School of Textiles for use in remodeling former classroom space into "one of the most modern library facilities in the nation."

Daily News Record, Feb. 23, 1949, p. 28.

DU PONT SPENDS OVER \$30 MILLION ON RAYON RESEARCH

Dr. Preston G. Hoff, assistant manager of the Technical Division of the Du Pont Company's Rayon Department, in a recent talk referred to the growing tendency in this country "to regard bigness in itself as inherently evil and, therefore, meriting distrust for no better reason than its size....Thirty years ago, rayon attracted little interest in the textile industry, while nylon and 'Orlon' weren't even gleams in the fiber chemist's eye. Yet business was willing to

risk millions of dollars—on theoretical possibilities. The Du Pont Company, only one part of the total rayon industry, has spent more than 30 million dollars on rayon research since the beginning. Comparable sums have been involved in the case of nylon and will be required for 'Orlon'. Only a large organization can engage in research of that magnitude."

Rayon and Synthetic Textiles, Jan. 1949, p. 69.

INDUSTRIAL RAYON CORP. APPOINTS NEW RESEARCH OFFICERS

Alden H. Burkholder has been appointed manager of rayon research for Industrial Rayon Corp. with Kenneth M. McLellan and Dr. George P. Standley made assistant managers, it was announced by Frederick L. Bissinger, vice-president in charge of research.

Daily News Record, Feb. 23, 1949, p. 42.

COTTONSEED AND PEANUTS

WORLD PRODUCTION OF FATS AND OILS SLIGHTLY BELOW PREWAR

World production of fats and oils from the important vegetable and animal sources in 1948 is estimated to be less than 21 million tons in terms of oil, a production slightly greater than in 1947, but still nearly 4 percent below prewar level. Supplies of fats and oils and the raw materials available for international trade in 1949 are expected to be considerably greater than the movement estimated for 1948. Production of oilseeds such as cottonseed, peanuts, soybeans, and sunflower, increased considerably in 1948 due primarily to exceptionally good growing conditions in the Northern Hemisphere. Total production of coconut oil, palm oil, and palm kernel oil was approximately the same as in 1947. The movement of linseed oil and flaxseed into international trade during 1948 was much lower than in 1947, leaving most of the supplying countries with heavy stocks, either of flaxseed or linseed oil, which will be available for export during 1949.

Foreign Crops and Markets, Feb. 21, 1949, p. 143.

PRICES OF VEGETABLE OILS AND MEALS CONTINUE TO DECLINE SLOWLY

Except for the prices of coconut oil and linseed oil, the prices of vegetable oils and meals continued to decline slightly following substantial declines during December and January. (Table 6).

PEANUT OIL PRODUCTION IN DOMINICAN REPUBLIC SHOWS GAIN

Prior to 1947, peanut production in the Dominican Republic was so small that it was not reported in government statistics. Approximately 7,000 tons were produced in 1947, 9,000 tons in 1948, and 1949 estimates are for a crop of 10,000 tons. Factory crushing capacity is 15,000 tons annually. A large crushing plant built in 1941 has averaged 500,000 gallons of oil a year, which has been sold domestically, and about 3,000 tons of peanut cake, which is used primarily for cattle feed.

Journal of Commerce, Feb. 24, Sec. 2, p. 38.

CASEIN OUTPUT RISES SHARPLY

January output of casein was 1,020,000 pounds, up 17 percent from January 1948, but still 13 percent under the 1943-47 average. The seasonal gain from December was 66 percent—far greater than the 8 percent gain last year and the 22 percent average gain. The PMA, in a market analysis, said prices of dry ground casein

at New York in the last week of February ranged from 20 to 23 cents f.o.b. plant for carlots in the New York area.

Journal of Commerce, Mar. 8, 1949, p. 16

Table 6.- Prices of vegetable oils and meals

	: March	: February	: January	: March	: September
	: 1949	: 1949 <u>11/</u>	: 1949	: 1948	: 1946
			Cents per pound		
OILS <u>1/</u>	: March 14	:	:	:	:
Cottonseed oil.....	11.8	: 13.2	: 15.3	: 23.9	: 12.5
Peanut oil.....	15.3	: 16.0	: 17.1	: 24.2	: 12.0
Soybean oil.....	11.3	: 12.3	: 14.7	: 21.4	: 11.8
Corn oil.....	12.3	: 13.7	: 16.2	: 23.2	: 12.8
Coconut oil <u>2/</u>	15.5	: 13.8	: 15.9	: 25.4	: 11.1
Linseed oil <u>3/</u>	28.8	: 28.8	: 28.8	: 29.2	: 17.8
Tung oil <u>4/</u>	21.8	: 22.0	: 22.7	: 26.4	: 39.0
			Dollars per ton		
MEALS <u>5/</u>	: March 12	:	:	:	:
Cottonseed meal <u>6/</u>	58.00	: 58.25	: 64.40	: 81.15	: 62.75
Peanut meal <u>7/</u>	68.00	: 70.37	: 69.25	: 85.50	: 67.25
Soybean meal <u>8/</u>	61.50	: 64.50	: 73.45	: 84.75	: 66.00
Coconut meal <u>9/</u>	67.50	: 70.37	: 70.60	: 82.20	: 59.70
Linseed meal <u>10/</u>	60.00	: 64.00	: 83.40	: 77.00	: 59.25

- 1/ Crude, tanks, f.o.b. mills except noted. From Oil Paint and Drug Reporter (daily quotations) and from Fats and Oils Situation, BAE (monthly quotations)
- 2/ Crude, tanks, carlots, Pacific Coast.
- 3/ Raw, drums, carlots, N. Y.
- 4/ Drums, carlots, N. Y.
- 5/ Bagged carlots, as given in Feedstuffs (daily quotation) and Feed Situation, BAE (monthly quotations).
- 6/ 41 percent protein, Memphis.
- 7/ 45 percent protein, S. E. Mills.
- 8/ 41 percent protein, Chicago.
- 9/ 19 percent protein, Los Angeles.
- 10/ 32 percent protein, Minneapolis, prior to May 1947; 34 percent protein after that date.
- 11/ Preliminary.

ADHESIVE OUTPUT EXPANDS, NEW USES FOUND

Use of adhesives instead of rivets on brake linings of 1949 Chrysler cars and Chevrolet highlights fact that adhesives today are being produced at a rate of about 1 billion pounds per year, 50 percent more than prewar. Use of adhesives from synthetic rubber has quadrupled since 1939; 83 percent of all furniture manufactured now contain urea glues. Among new applications of adhesives are "unwoven" draperies, in place of rivets in harmonicas, setting ceramic tile, etc. Synthetics now represent 10 percent to 15 percent of glue poundage and 20 percent to 30 percent of dollar volume. Animal glue output has increased from 101 million pounds in 1939 to 150 million pounds today; vegetable glues from 178 million pounds in 1939 to 260 million pounds at present.

Wall Street Journal, March 15, 1949, p. 1.

C I T R U S

WORLD CITRUS PRODUCTION FOR 1948 8 PERCENT BELOW 1947

World production of citrus for 1948 is about 348 million boxes, 8 percent below the 1947 production of 377 million and 27 percent above the 5-year average of 273 million. Oranges account for 78 percent of the estimated world production, grapefruit 15 percent, lemons 6 percent and limes 1 percent. The United States production of oranges is estimated at 104 million boxes. This is 9 percent below the 1947 crop of 114 million, but 56 percent above the 1935-39 average of 67 million. The United States, by far the world's largest producer of grapefruit, has an indicated crop of 48.4 million boxes in 1948, 21 percent below the 1947 crop of 61.6 million and 52 percent above the prewar average of 31.8 million. This country is also the largest producer of lemons, producing 8.9 million boxes or 31 percent below the 1947 crop of 12.9 million and 7 percent below the 1935-39 average of 9.6 million.

Foreign Crops and Markets, Feb. 21, 1949, p. 128.

S U G A R

ALCOHOL WAR: DISTILLERS BATTLE PRODUCERS OF SYNTHETIC

Alcohol is offered at 23 cents a gallon or 67 percent below the level of three months ago. Before the war, alcohol ranged from 25 cents to 30 cents a gallon. During the war, its price skyrocketed, and in 1947 it reached a peak of \$1.05 a gallon. Back of this price war are old-line distillers of alcohol from molasses on one side and two petroleum companies and two big chemical firms that create synthetic alcohol from oil refinery gases on the other side. Cuba is hardest hit of all. As the price of alcohol goes, so goes the price of molasses, a by-product of sugar manufacture. Last year's total output of 300 million gallons of molasses in Cuba brought from \$75 million to \$90 million. A similar amount this year might bring only \$12 million. Independent experts estimate oil and chemical companies costs might run as low as 15 cents a gallon. Distillers need two and one-half gallons of molasses to make a gallon of alcohol. Even at four cents a gallon for molasses, this would mean 10 cents for raw materials; to this can be added six to eight cents a gallon for processing. Thus, total production costs would run as high or higher than those of the synthetic alcohol makers. Before the war, oil and chemical companies produced only 17 million gallons of alcohol a year, of a total output of about 100 million. Last year, capacity for synthetic production was about 110 million gallons annually. So the petroleum gas users are in a position to turn out about 70 percent as much alcohol as the estimated 160 million gallons produced by all kinds of makers last year.

Wall Street Journal, Feb. 23, 1949, p. 1

L I N T E R S A N D C E L L U L O S E

NO CHANGE IN LINTERS PULP AND WOOD PULP PRICES

Cellulose prices remained unchanged during the month (table 7).

Table 7.- Average annual price of purified linters and dissolving wood pulp, 1946-47 and monthly quotations October-December, 1948 and January-February, 1949

(Cents per pound)					
	Purified linters <u>1/</u>	Standard viscose grade	Wood pulp <u>2/</u> High-Tenacity viscose grade	Acetate & cupra grade	
1946.....	9.50	5.60	5.85	6.15	
1947.....	16.30	7.03	7.44	8.04	
1948, October.....	9.35	8.20	8.70	9.50	
1948, November.....	9.35	8.20	8.70	9.50	
1948, December.....	9.35	8.20	8.70	9.50	
1949, January.....	9.35	8.20	8.70	9.50	
1949, February.....	9.35	8.20	8.70	9.50	

1/ Weighted averages, 1946-47. On 7 percent moisture basis, f.o.b. pulp plant. Average freight to users is 0.5 percent per pound. Prices supplied by a producer.

2/ Average of average monthly prices, 1946-47. Compiled from Rayon Organon and from letters to us from producer. Wood pulp prices are 10 percent moisture basis, f.o.b. domestic producing mill, full freight, and 3 percent transportation tax allowed, Dec. 1, 1947 on; freight equalized with that Atlantic or Gulf port carrying lowest backhaul rate to destination plus 3 percent backhaul charges, prior to December 1.

CELLULOSE CONSUMPTION IN RAYON INDUSTRY CLIMBS: LINTERS' PERCENTAGE INCREASES SLIGHTLY

According to the Rayon Organon (March 1949), consumption of cellulose by the rayon industry totaled 539,500 tons in 1948, of which 104,500 tons was linters pulp. The quantity of linters consumed rivaled the record total reached in 1946 and comprised 19 percent of the total as compared with 17 percent in 1947. According to the Organon, "Wood pulp is used almost entirely in the production of regular tenacity types of yarn and staple. The producers' practices differ, however, in the intermediate and high tenacity types, ranging from the use of 100% wood pulp to blends of linters and wood pulp, and on to 100% linters pulp." (See table 8).

ACETATE PLASTIC PRICE CUT BY TWO COMPANIES

The Tennessee Eastman Corp., subsidiary of Eastman Kodak Co., and Celanese Corp., reduced the base price of cellulose acetate plastics material 7 cents a pound to 35 cents. This cut was made to bring prices in line with polystyrene plastics which sell at 27 cents a pound, and which lately have been cutting into the market for acetate. "Tenite I" for injection molding was reduced to 35 cents a pound from 42 cents for lots of 20,000 pounds. Lots from 2,000 to 20,000 pounds were cut to 38 cents a pound from 45 cents. Acetate plastics for extrusion molding are still priced at 42 cents a pound. Injection molding is the method of making such items as radio cabinets, while extrusion is used to make long strips and tubes. Cellulose acetate makers have been helped by the lower price of cotton linters which sold as high as 12 cents a pound during the war and which are now down to 4 or 5 cents a pound.

Wall Street Journal, March 2, 1949, p. 12.

Table 8.- Approximate quantities of linters pulp and wood pulp used in rayon by processes, United States, 1930-48

	: Linters :	Wood :	Total :	: Linters :	Wood :	Total :
	: pulp :	pulp :		: pulp :	pulp :	
	: 1,000 :	1,000 :	1,000 :	: 1,000 :	1,000 :	1,000 :
	: tons :	tons :	tons :	: Percent :	Percent :	Percent :
All processes	:	:	:	:	:	:
1930.....	27	45	72	38	62	100
1935.....	51	86	137	37	63	100
1940.....	60	178	238	25	75	100
1942.....	395	280.5	320	12	88	100
1945.....	103	297	400	26	74	100
1946.....	105	323	428	25	75	100
1947.....	81	397	478	17	83	100
1948.....	104.5	435	539.5	19	81	100
Viscose and cupra	:	:	:	:	:	:
1945.....	80	245	325	25	75	100
1946.....	75	272	347	22	78	100
1947.....	49	320	369	13	87	100
1948.....	58.5	349	407.5	14	86	100
Acetate	:	:	:	:	:	:
1945.....	23	52	75	31	69	100
1946.....	30	51	81	37	63	100
1947.....	32	77	109	32	68	100
1948.....	46	86	132	35	65	100

All prices and percentage data from Rayon Organon. Our estimates of quantities by viscose and cupra, and acetate processes.

DISSOLVING WOOD PULP PRODUCTION AND EXPORTS INCREASE IN 1948 WHILE IMPORTS DECLINE

Production of dissolving wood pulp in the U. S. for 1948 was 356,700 tons, an increase of 9 percent over the 324,927 tons for 1947. There was a slight reduction of imports and an increase in exports from 15,937 tons in 1948 as compared with 10,389 tons in 1947, a decrease of 6.5 percent. (Table 9)

Table 9.- Dissolving wood pulp: Production, exports, imports and quantities made available for consumption, U.S., 1939-48

	(Tons)			
	: Domestic :	: Imports 2/ :	: Exports 2/ :	: Available for :
	: production 1/ :			: domestic con- :
	: :			: sumption 3/ :
1939.....	4/	88,052	48,232	4/
1945.....	4/	143,802	13,033	4/
1946.....	4/	202,192	8,491	4/
1947.....	324,927	248,606	10,389	563,144
1948.....	356,700	243,740	15,937	584,503
1948, November.....	32,749	21,003	1,519	52,233
1948, December.....	26,057	16,426	1,445	42,483

1/ Sulphite, bleached, dissolving grades. From Facts for Industry, Pulp and Paper Manufacture, Bureau of the Census.

2/ Sulphite, bleached, rayon and special chemical grades. Data from foreign commerce statistics of the United States, Bureau of the Census.

3/ Production plus imports less exports.

CONSUMPTION OF CELLULOSIC MOLDING MATERIALS SHOW DECLINE IN 1948

Confronted with serious competition from other materials, cellulosic molding materials fell off again in consumption during 1948. Excluding the nitrocellulose plastics and taking only the cellulose acetate and mixed ester plastics, the statistics show a decline in total consumption from 77.4 million pounds in 1947 to 65.2 million in 1948. A breakdown into the various end uses for cellulose acetate, compiled by the editorial staff of Modern Plastics, is as follows: Toys and novelties, 20 percent; communications (telephone, radio and television), 5 percent; hardware (furniture, kitchen, tool parts, etc.), 10 percent; household, 10 percent; industrial, 10 percent; transportation (automobile, aircraft and bicycles), 5 percent; personal (sunglasses, barettes, buttons, combs, jewellery, cosmetic containers, etc.), 15 percent; continuous extrusion (includes articles formed from extruded sections), 15 percent; miscellaneous, 10 percent.

Modern Plastics, January 1949.